REMARKS

The present application relates to hybrid maize plant and seed 34G13. Claims 1-32 are currently pending in the present application. Applicant respectfully requests consideration of the following remarks.

Detailed Action

A. Specification

The Examiner acknowledges Applicant's intent to amend the specification upon the deposit of the claimed seed upon the indication of allowability of the claims. Applicant wishes to reiterate they will refrain from depositing these lines until indication of allowable subject matter and will amend the specification accordingly at his time.

B. Claim Objections and Rejections

The Examiner further acknowledges Applicant's intent to amend claims 1, 5 (amended) and 7 (amended) upon indication of allowability of the claims acknowledged. As provided in 37 § CFR 1.801-1.809, Applicant wishes to reiterate they will refrain from deposit of Hybrid 34G13 until allowable subject matter is indicated. Upon such indication, claims 1, 5 (amended) and 7 (amended) will be amended to include the accession number as suggested by the Examiner.

Rejections Under 35 U.S.C. § 101

The Examiner maintains the rejection of claims 1-4, 5-7 (all amended), 9-11 (all amended), 12 and 13-14 (both amended) under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 1-13 of U.S. Patent No. 6,075,187. The Examiner notes that although the conflicting claims are not identical, they are not patentably distinct from each other. The Examiner further notes that the designation "34G13" does not distinguish the instantly claimed seeds and plants from 33G26, as it appears to be an arbitrarily assigned designation. The Examiner previously concluded in the last Office Action that insertion of the ATCC deposit number in claims 1, 5 (amended) and 7 (amended) will overcome the rejection. Applicant respectfully traverses this rejection. While Applicant does not agree that this rejection is appropriate, under 37 CFR § 1.801-1.809, Applicant will refrain from deposit of

Hybrid 34G13 until allowable subject matter is indicated. Once deposit is completed Applicant will amend claims 1, 5 (amended) and 7 (amended) accordingly and this rejection will be moot.

Rejections Under 35 U.S.C. § 112, Second Paragraph

The Examiner maintains the rejections to claims 1-4, 5-11 (all amended), 12, 13-15 (all amended), 16, 17-19 (all amended), 20, 21-24 (all amended), 25, 26-28 (all amended), 29 and 30-32 (all amended) under 35 U.S.C. § 112, second paragraph, "as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." The Examiner notes that the recitation "Hybrid maize seed designated 34G13" in claims 1, 5 (amended) and 7 (amended), render the claims and those dependent thereon indefinite. The Examiner states the that name "34G13" does not clearly identify the hybrid maize seeds and concludes that amending the claims to recite the ATCC deposit number would overcome the rejection. Applicants respectfully traverse this rejection. Applicants will refrain from amending the claim until the time of the actual deposit as set forth in 37 CFR § 1.801-1.809

Rejections Under 35 U.S.C. § 112, First Paragraph

The Examiner maintains the rejections to claims 1-4, 5-11 (all amended), 12, 13-15 (all amended), 16, 17-19 (all amended), 20, 21-24 (all amended), 25, 26-28 (all amended), 29 and 30-32 (all amended) under 35 U.S.C. § 112, first paragraph. Applicant respectfully traverses this rejection and again reiterates with regard to deposit of Hybrid 34G13, Applicant wishes to note that:

- a) during the pendency of this application access to the invention will be afforded to the Commissioner upon request;
- b) all restrictions upon availability to the public will be irrevocably removed upon granting of the patent;
- c) the deposit will be maintained in a public depository for a period of thirty years, or five years after the last request for the enforceable life of the patent, whichever is longer;
- d) a test of the viability of the biological material at the time of deposit will be conducted (see 37 C.F.R. § 1.807); and

e) the deposit will be replaced if it should ever become inviable...

Applicant wishes to state that the actual ATCC deposit will be delayed until the receipt of notice that the application is otherwise in condition for allowance. Once such notice is received, an ATCC deposit will be made, and the specification will be amended to contain the accession number of the deposit, the date of the deposit, a description of the deposited biological material sufficient to specifically identify it and to permit examination and the name and address of the depository. The claims will also be amended to recite the ATCC deposit number. In addition, Applicant submits that at least 2,500 seeds of Hybrid 34G13 will be deposited with the ATCC. In light of the above, Applicant respectfully requests the Examiner reconsider and withdraw this rejection.

<u>Issues Under 35 U.S.C. § 102/103</u>

The Examiner maintains the rejections to claims 1-4, 5-11 (all amended), 12, 13-15 (all amended), 16, 17-19 (all amended), 21, 21-24 (all amended), 25, 26-28 (all amended), 29 and 30-32 (all amended) under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Stucker (U.S. Patent No. 6,075,187). The Examiner concluded, in the last Office Action dated June 29, 2001, that amendment of claims 1, 5 (amended) and 7 (amended) to include ATCC numbers will overcome the rejection for claims 1-10, 12-14, 16-18, 20-23, 25-27, and 29-31. Applicant will amend the claims accordingly upon indication of otherwise allowable subject matter

In the previous Office Action, the Examiner noted that claims 11, 15, 19, 24, 28 and 32 (all amended) are still taught by Stucker as cultivar 33G26 has at least two of the characteristics of the 34G13 listed in those claims. The Examiner concludes that the process of making the claimed plants does not distinguish the plants themselves from those taught by the reference, concluding that the invention was clearly "prima facie" obvious as a whole to one of ordinary skill in the art, if not anticipated by Stucker.

Applicant respectfully traverses this rejection and requests reconsideration of claims 11, 15, 19, 24, 28, and 32 (all previously amended). Applicant submits that the claim does not simply recite traits, such as very good Anthracnose stalk rot resistance or relative maturity of 108, but instead recites these specific traits only to the extent that they are "34G13" traits;

thereby coming solely from the seed/germplasm of 34G13. When looking at maize plants it would be possible for one ordinarily skilled in the art to find many traits that are similar between varieties such as the disease resistance or growth habit. Nonetheless, the claim also recites that the claimed plant must have 34G13 as an ancestor further indicating that these traits must originate from the 34G13 plant. In response to the Examiner's contention that one could not distinguish the claimed plant from the prior art which shows each of these traits, Applicant submits that one can easily tell by reference to the plants breeding history or its molecular profile whether the plant did indeed have plant 34G13 as an ancestor and expressed two or more "34G13" traits. Further, any phenotypic trait that is expressed is a result of a combination of all of the genetic material present in the plant, and 34G13 will have its own unique genetic profile that it will contribute to a breeding program. This unique genetic background will that result in the claimed plant and this profile along with its combination with other plants will result in a unique combined genetic profile that is the product claimed. The resulting plant will not just have traits, but "34G13" traits which will be a unique combination of genetic material.

Applicant further asserts that although other plants may possess similar traits that does not then make the claimed invention obvious, if not anticipated by Stucker. Further, there is no expectation of success that the crossing of the Hybrid 33G26 with some yet to be identified plant would yield a plant with two of the traits enumerated in the claimed invention because that particular plant did not begin with the claimed seed 34G13 which is essential. Without any teaching about dominance, or heritability of such traits it cannot be said that there is an expectation of success that the combination of plants would achieve the combination enumerated in the claimed invention, to say nothing of issues such as inbreeding depression etc. Applicant asserts that it is not the phenotypic characteristics alone that are claimed and taught in the instant invention. It is a combination of physiological and morphological characteristics, as claimed, which make the present Hybrid non-obvious and not anticipated over Stucker. Additionally, as evidenced in Tables 2(A-G), 3 and 4, several significant differences exist between hybrid 33G26 and 34G13. Not only are these two hybrids significantly different with respect to many traits, but the genetic profile that is responsible for those differences that each would contribute to a breeding program as ancestors would also be different and unique, as would the descendants. Further, In re Thorpe, states that "a product by process claim may be properly rejected over prior

art teaching the same product produced by a different process", as noted by the Examiner. 227 USPQ 964, 966 (Fed. Cir. 1985). However, Applicant submits that this is <u>not</u> the same product physiologically or morphologically as the cited prior art as can be evidenced by one skilled in the art through analysis of the data tables in each.

Finally, as discussed above, 34G13 and plants derived from 34G13 are clearly differentiated from 33G26. It must be recognized that the 34G13-derived plants are themselves unusual and a non-obvious result of a combination of previously unknown and non-obvious genetics. In addition to the phenotypic traits described herein, each 34G13-derived plant has an additional benefit unique to each specific cross using 34G13 as one of its ancestors. Thus, they deserve to be considered new and non-obvious compositions in their own right as products of crossing when 34G13 is used as a starting material.

In light of the above, Applicant respectfully requests the Examiner reconsider and withdraw the rejection to claims 1-4, 5-11 (all amended), 12, 13-15 (all amended), 16, 17-19 (all amended), 21, 21-24 (all amended), 25, 26-28 (all amended), 29 and 30-32 (all amended) under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Stucker.

Conclusion

Applicant submits that, in light of the foregoing amendments and remarks, the claims, as amended, are in condition for allowance. Reconsideration and early notice of allowability are respectfully requested.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

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